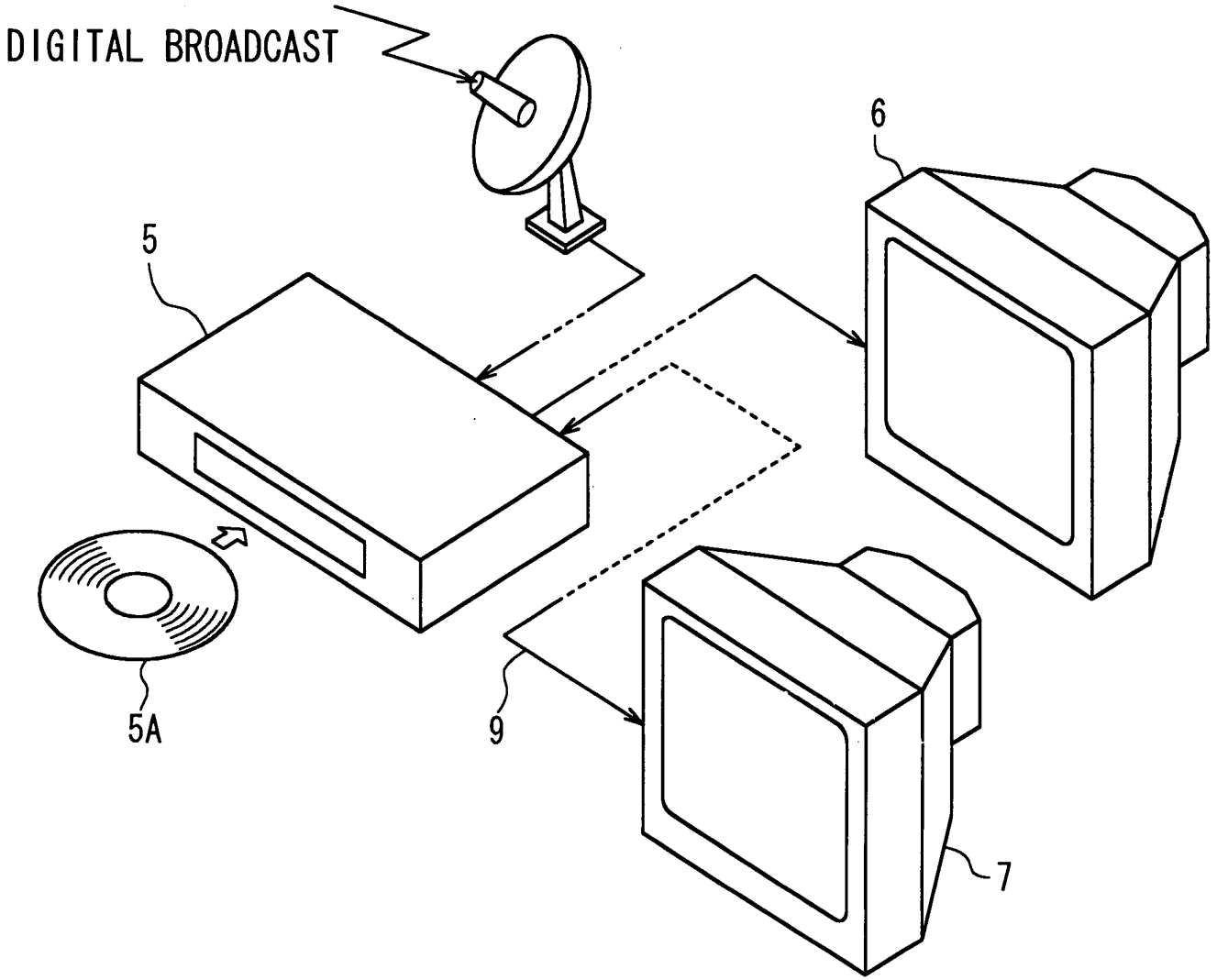
0077Z0 S69ST960

FIG. 1



1-5800d00S

FIG. 2

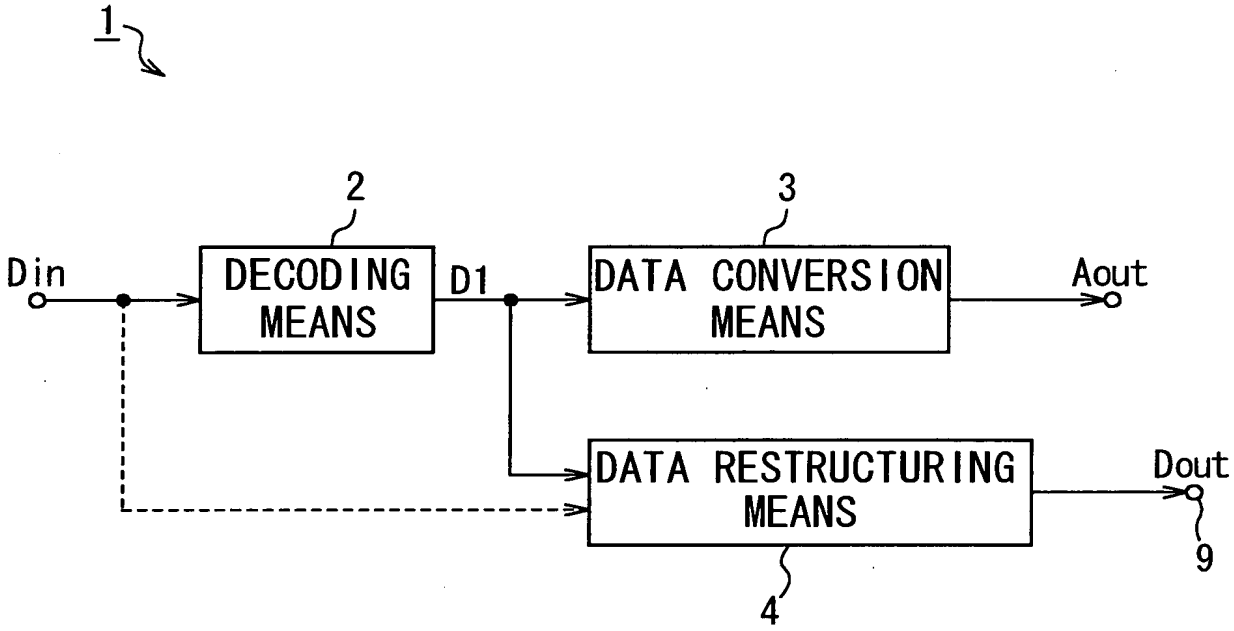

1
2
3
Din
DECODING MEANS
D1
DATA CONVERSION MEANS
Aout
DATA RESTRUCTURING MEANS
Dout
9
4

FIG. 3

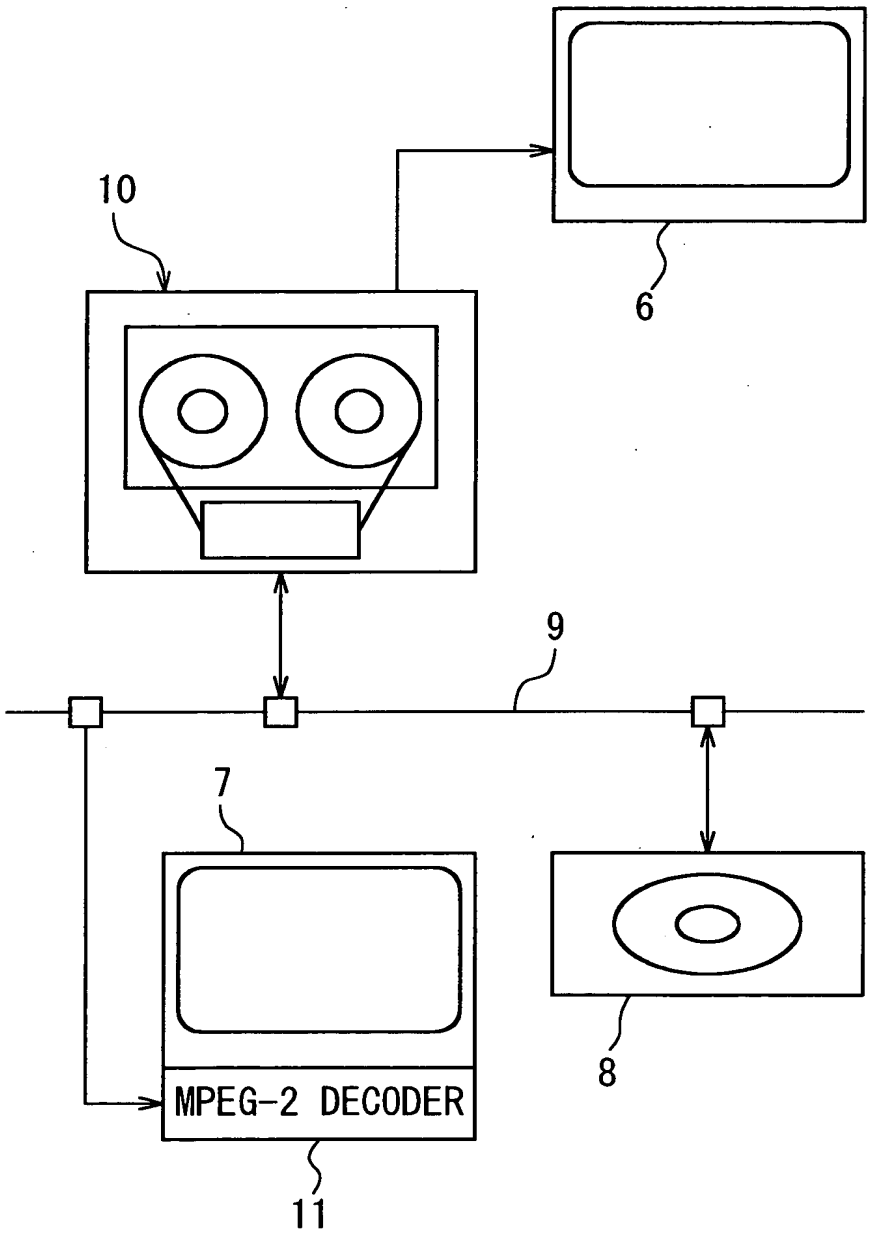


FIG. 4

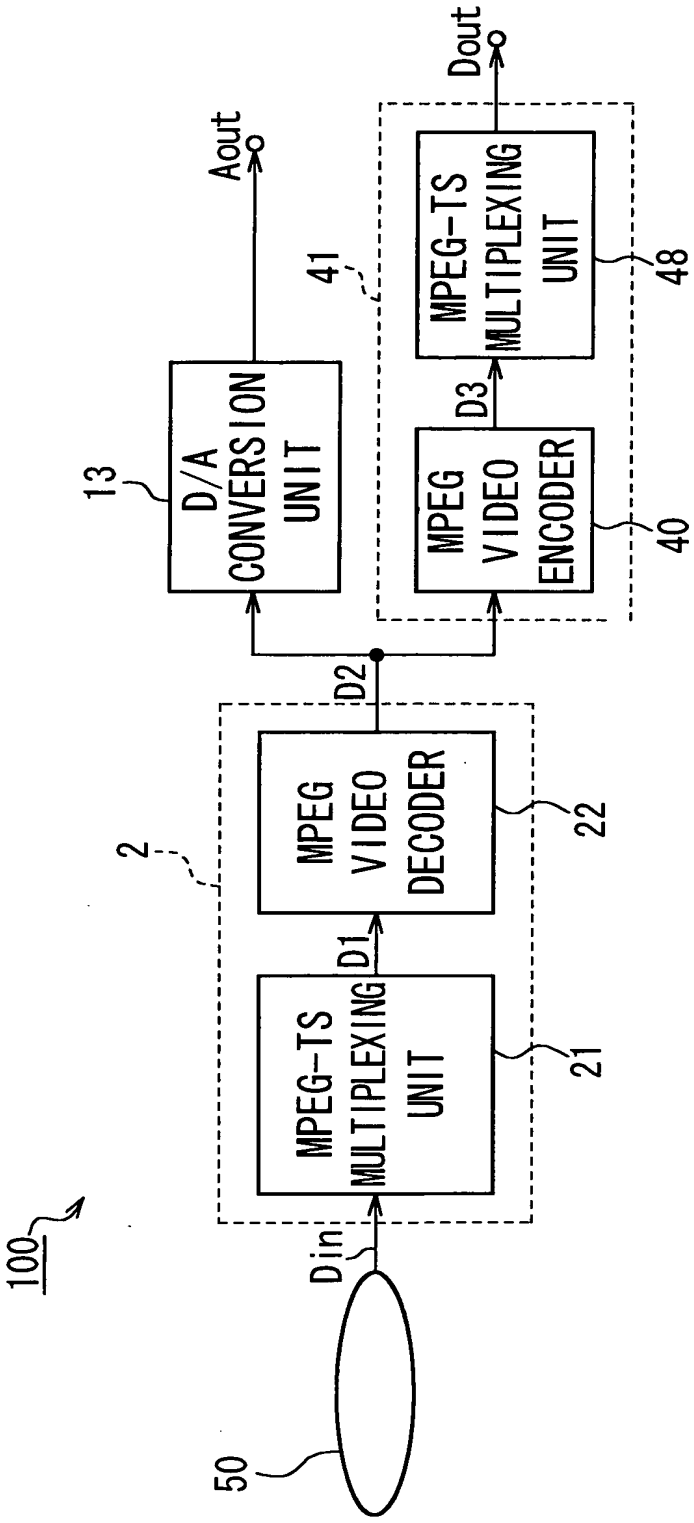

100
Din
50
MPEG-TS MULTIPLEXING UNIT
21
D1
MPEG VIDEO DECODER
22
2
D2
D/A CONVERSION UNIT
13
Aout
41
MPEG VIDEO ENCODER
40
D3
MPEG-TS MULTIPLEXING UNIT
48
Dout

FIG. 5

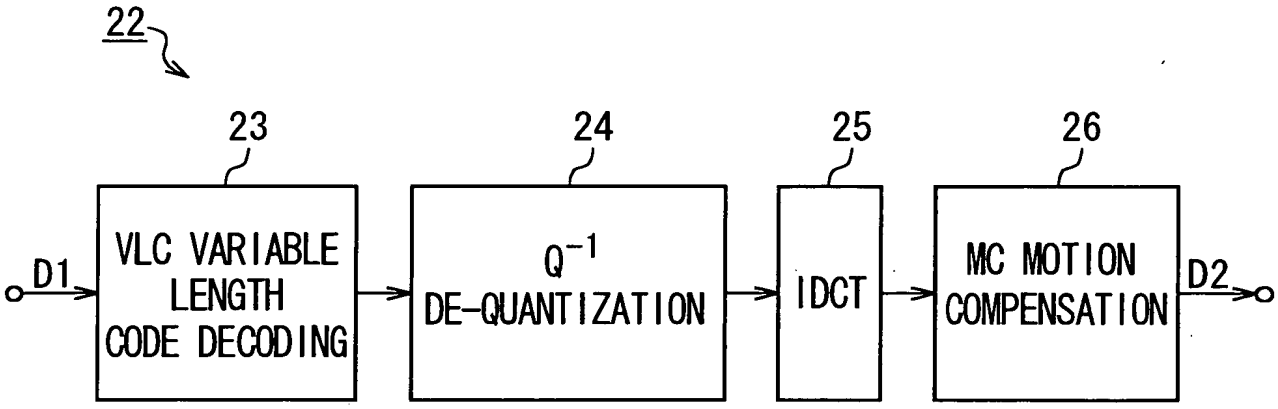

22
23
24
25
26
D1
VLC VARIABLE LENGTH CODE DECODING
Q^{-1} DE-QUANTIZATION
IDCT
MC MOTION COMPENSATION
D2

FIG. 6

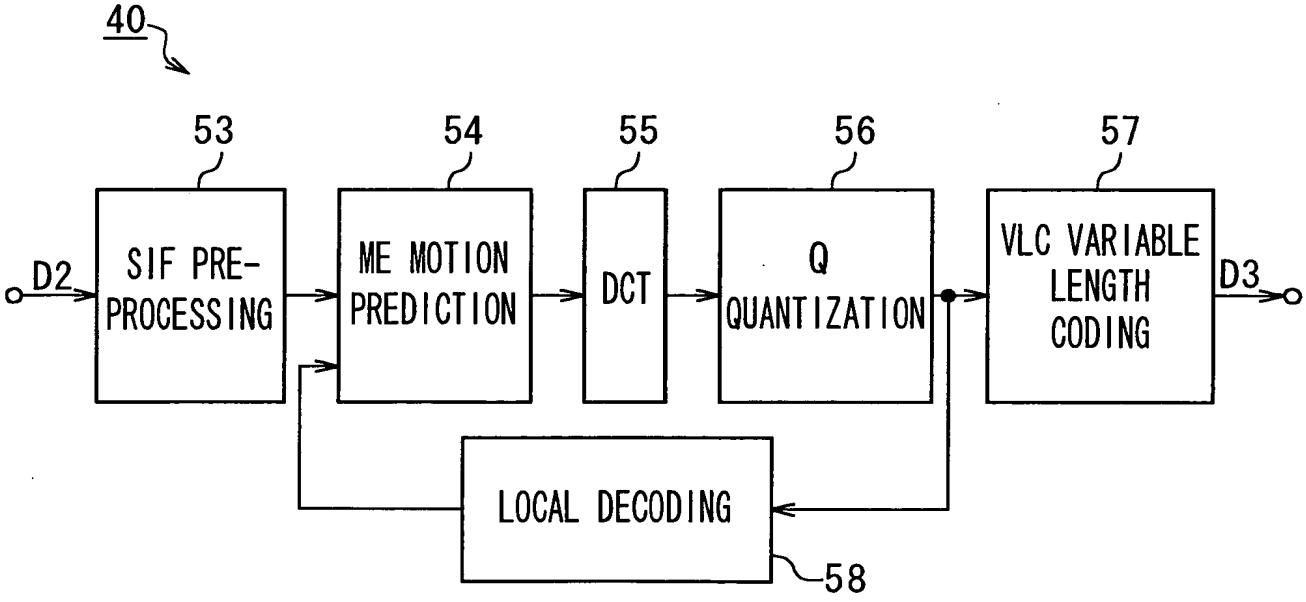
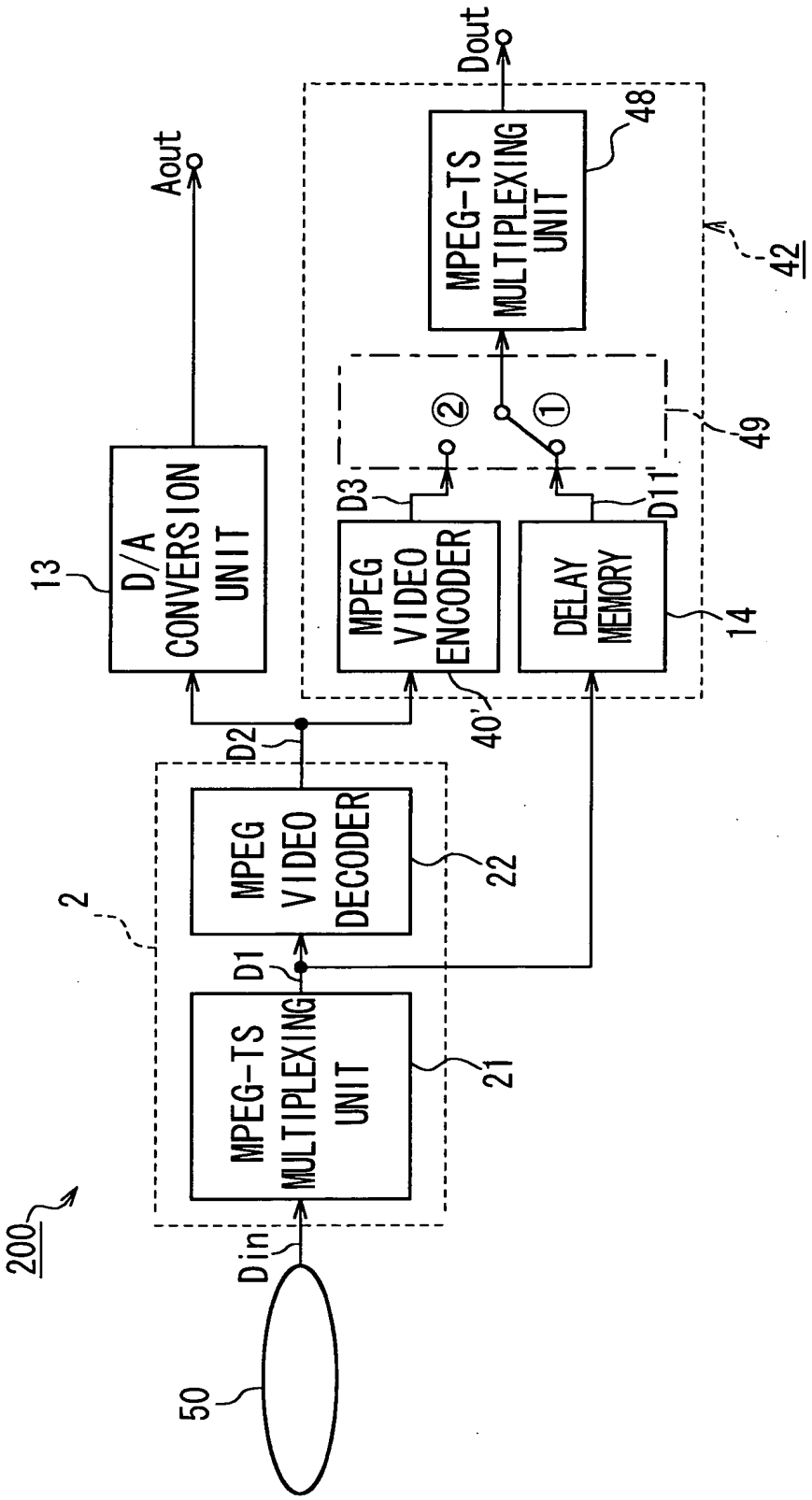

40
53
54
55
56
57
D2
SIF PRE-PROCESSING
ME MOTION PREDICTION
DCT
Q QUANTIZATION
VLC VARIABLE LENGTH CODING
D3
LOCAL DECODING
58

FIG. 7


200
50
Din
2
MPEG-TS MULTIPLEXING UNIT
21
D1
MPEG VIDEO DECODER
22
D2
D/A CONVERSION UNIT
13
Aout
40'
MPEG VIDEO ENCODER
D3
DELAY MEMORY
D11'
14
49
①
②
MPEG-TS MULTIPLEXING UNIT
48
Dout
42

DOCID: 2002156960

FIG. 8

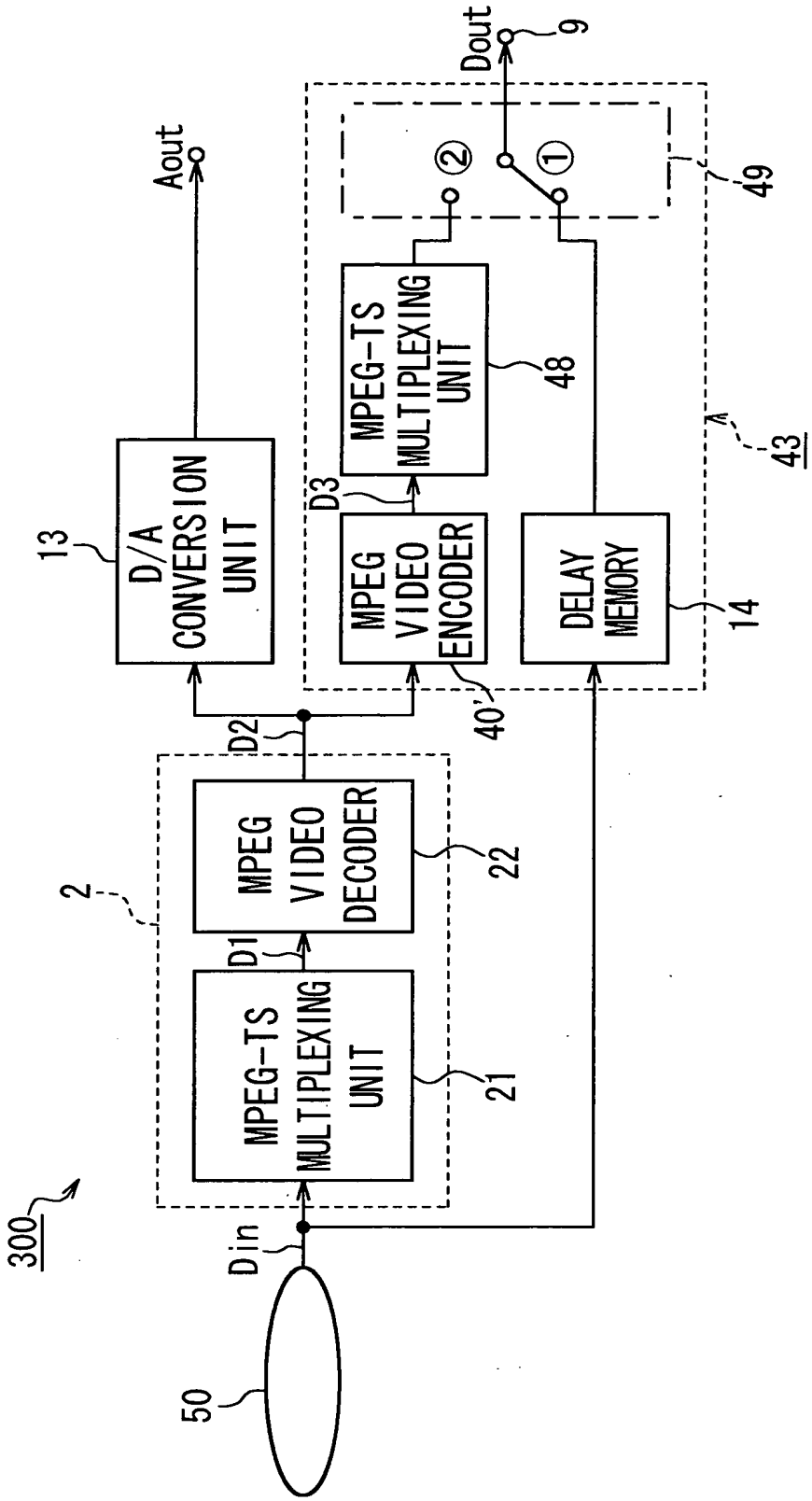


FIG. 9

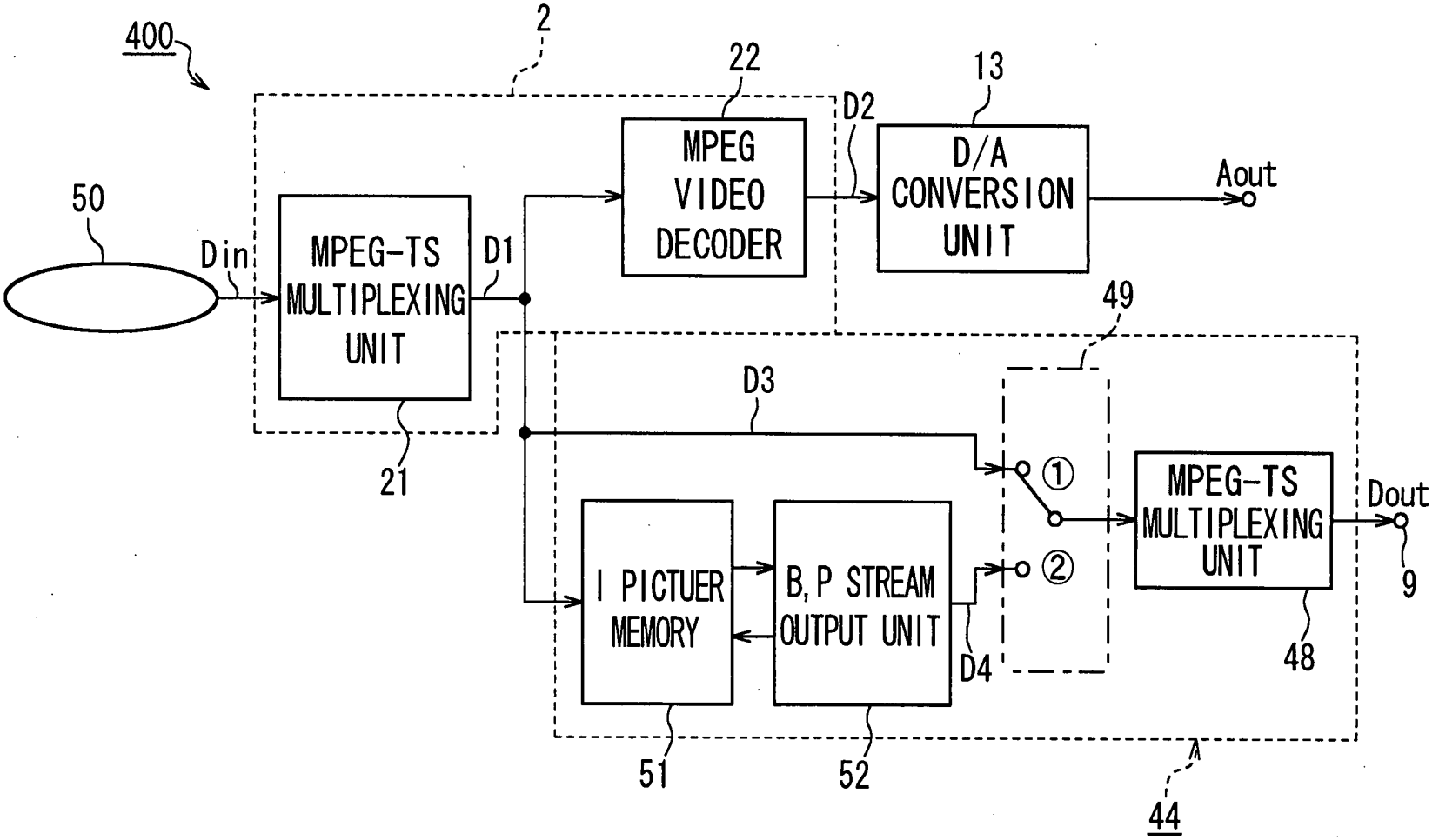

400
2
22
13
D2
MPEG VIDEO DECODER
D/A CONVERSION UNIT
Aout
50
Din
MPEG-TS MULTIPLEXING UNIT
D1
49
D3
①
②
MPEG-TS MULTIPLEXING UNIT
Dout
9
I PICTUER MEMORY
B,P STREAM OUTPUT UNIT
D4
48
21
51
52
44

FIG. 10

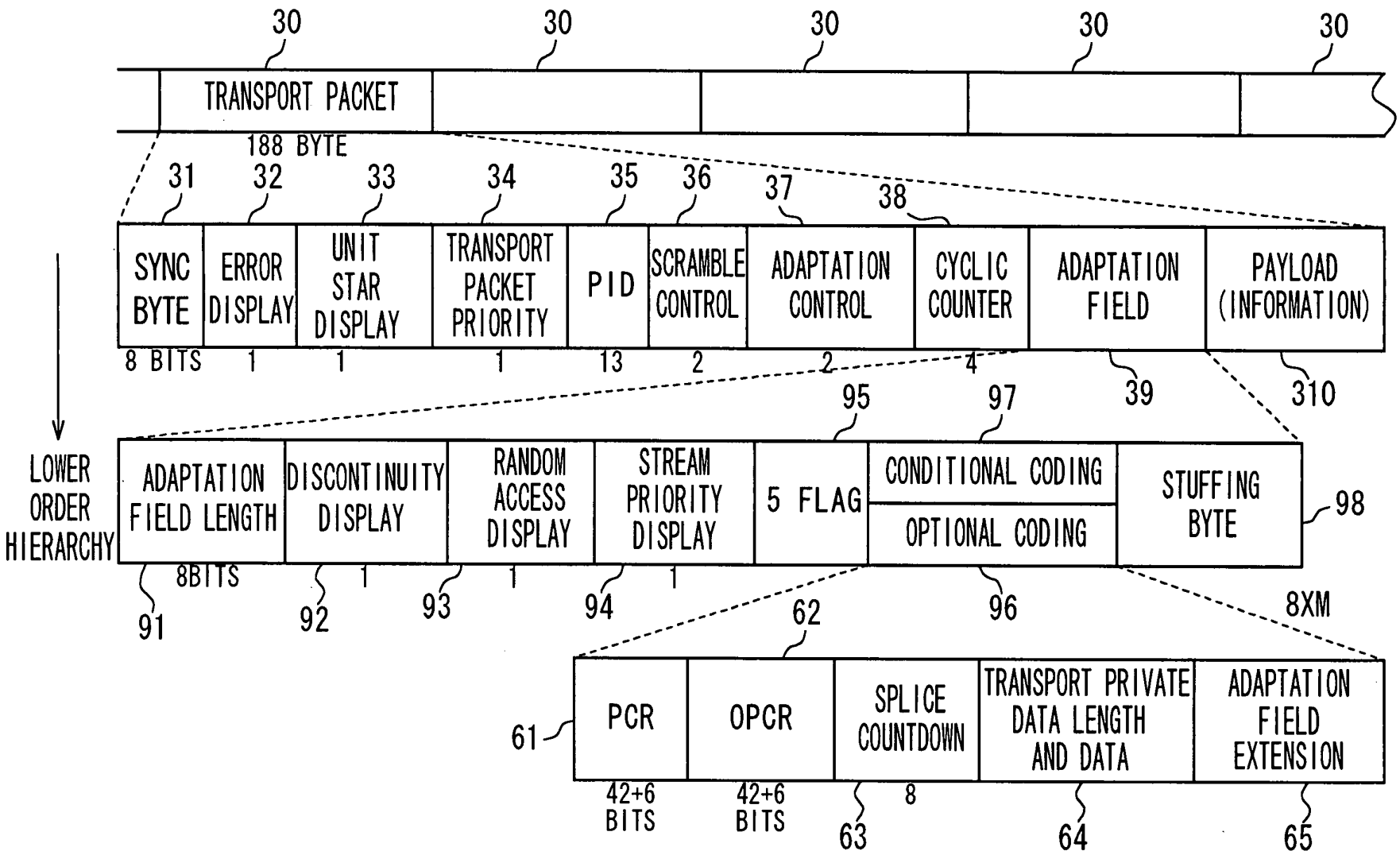
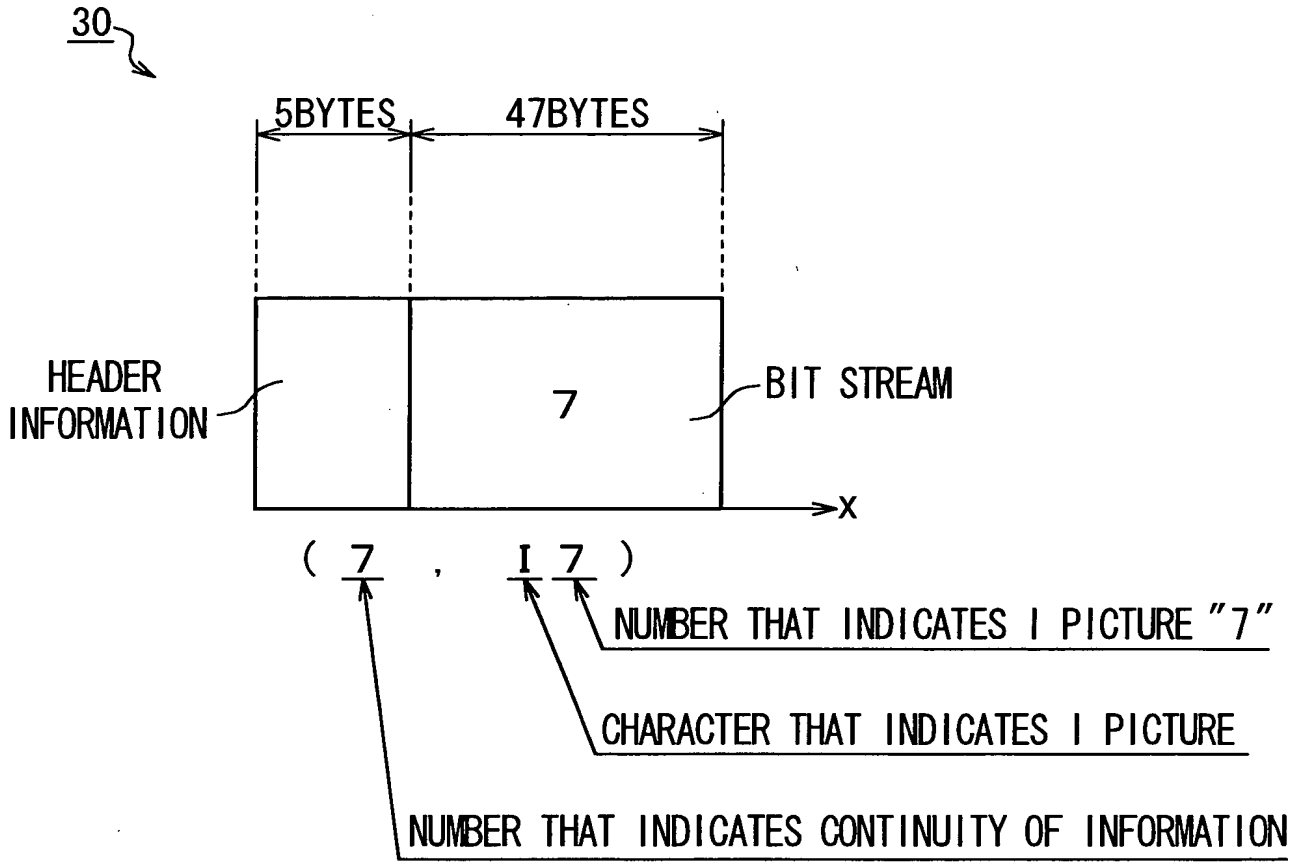

30
30
30
30
30
TRANSPORT PACKET
188 BYTE
31
32
33
34
35
36
37
38
SYNC BYTE
ERROR DISPLAY
UNIT STAR DISPLAY
TRANSPORT PACKET PRIORITY
PID
SCRAMBLE CONTROL
ADAPTATION CONTROL
CYCLIC COUNTER
ADAPTATION FIELD
PAYLOAD (INFORMATION)
8 BITS
1
1
1
13
2
2
4
39
310
LOWER ORDER HIERARCHY
95
97
ADAPTATION FIELD LENGTH
DISCONTINUITY DISPLAY
RANDOM ACCESS DISPLAY
STREAM PRIORITY DISPLAY
5 FLAG
CONDITIONAL CODING
OPTIONAL CODING
STUFFING BYTE
98
8BITS
1
1
1
1
91
92
93
94
96
8XM
62
61
PCR
OPCR
SPLICE COUNTDOWN
TRANSPORT PRIVATE DATA LENGTH AND DATA
ADAPTATION FIELD EXTENSION
42+6 BITS
42+6 BITS
8
63
64
65

FIG. 11



HEADER INFORMATION: INFORMATION GENERATED BY MULTIPLEXING TS
BIT STREAM: INFORMATION THAT INDICATES MPEG VIDEO STREAM "7"

FIG. 12

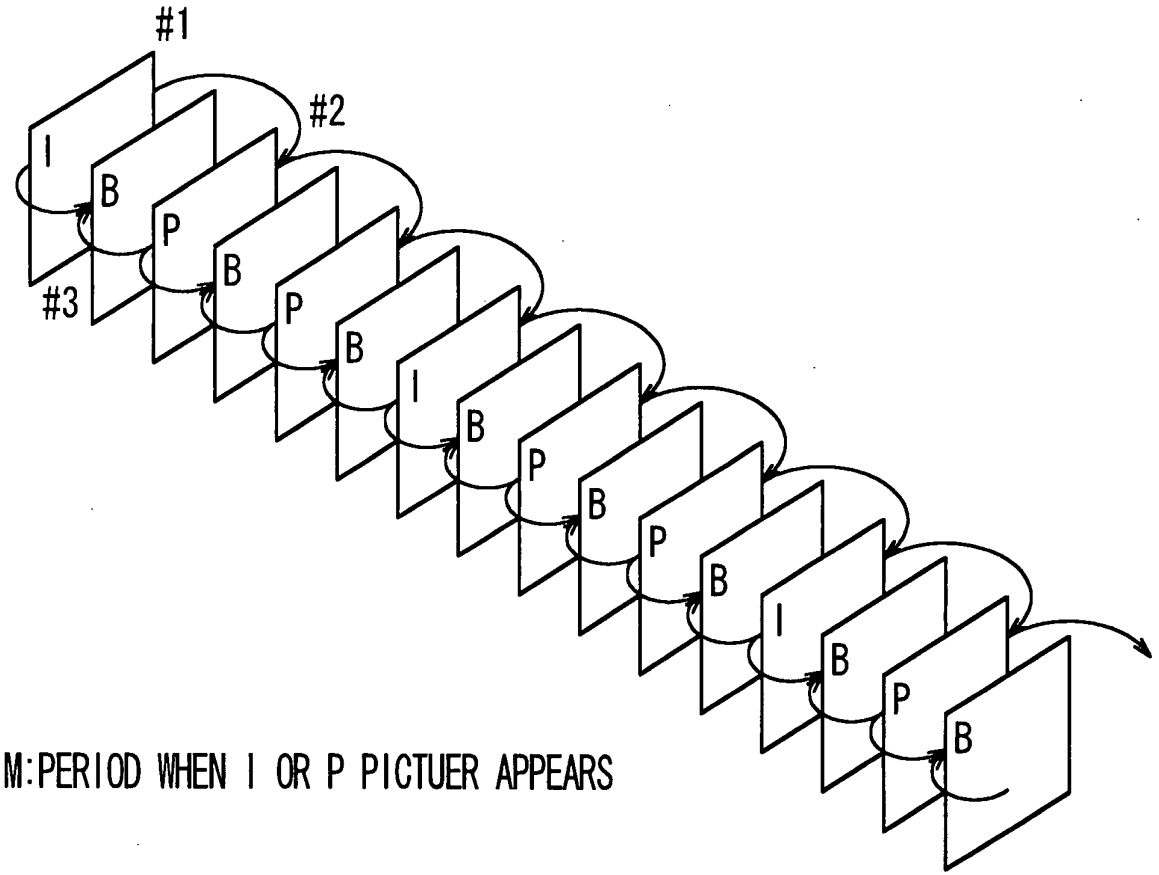


FIG. 13

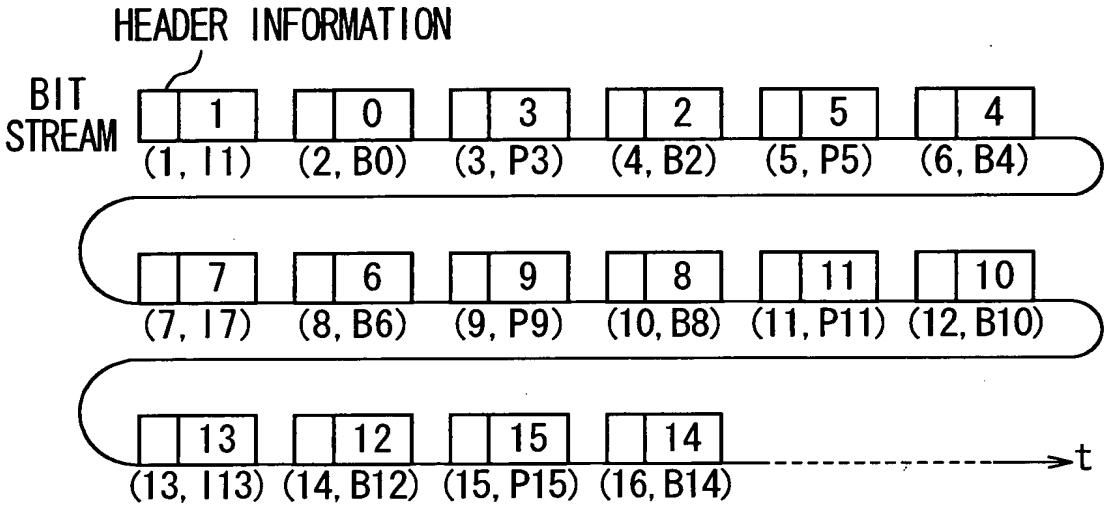

HEADER INFORMATION
BIT STREAM
1
0
3
2
5
4
(1, I1)
(2, B0)
(3, P3)
(4, B2)
(5, P5)
(6, B4)
7
6
9
8
11
10
(7, I7)
(8, B6)
(9, P9)
(10, B8)
(11, P11)
(12, B10)
13
12
15
14
(13, I13)
(14, B12)
(15, P15)
(16, B14)
t

FIG. 14

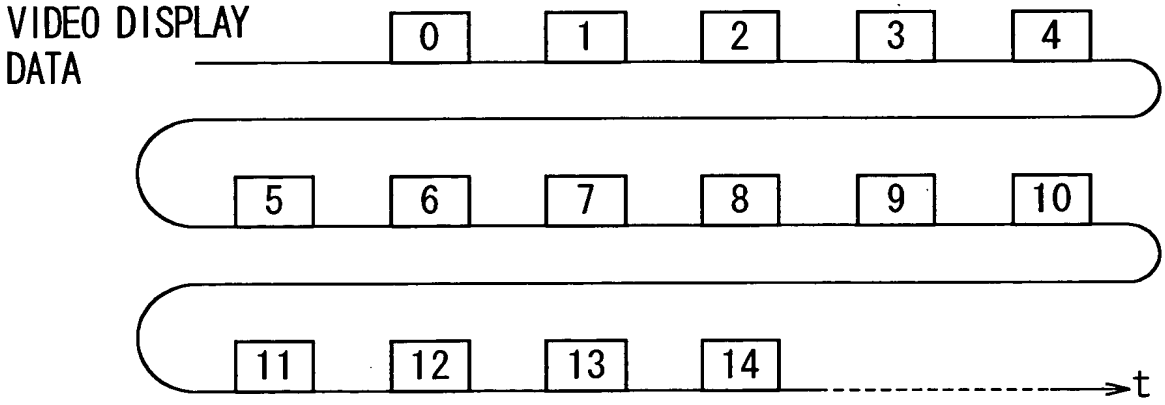
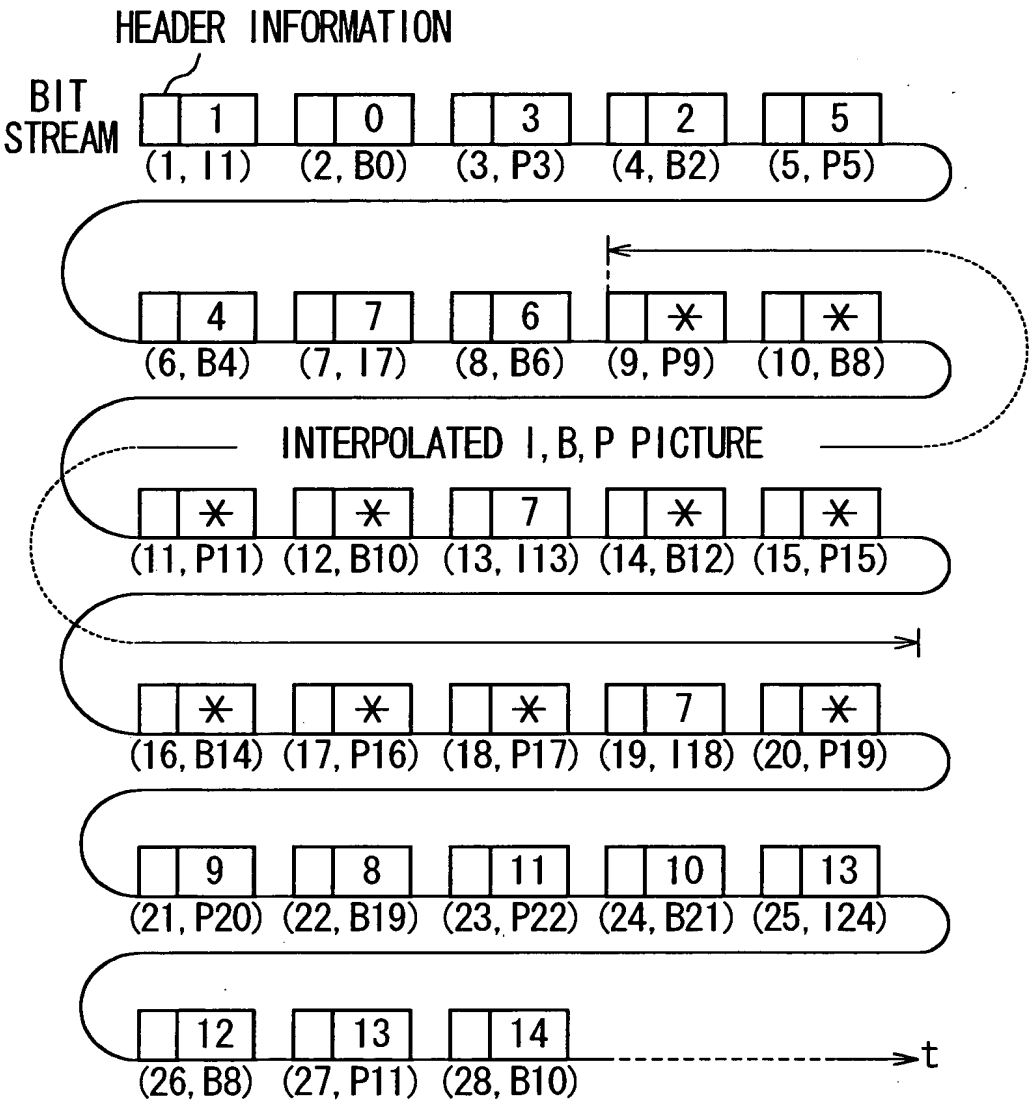

VIDEO DISPLAY DATA
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
t

FIG. 15



* :BIT STREAM OF P OR B PICTURE OF DIFFERENCE "0"

FIG. 16

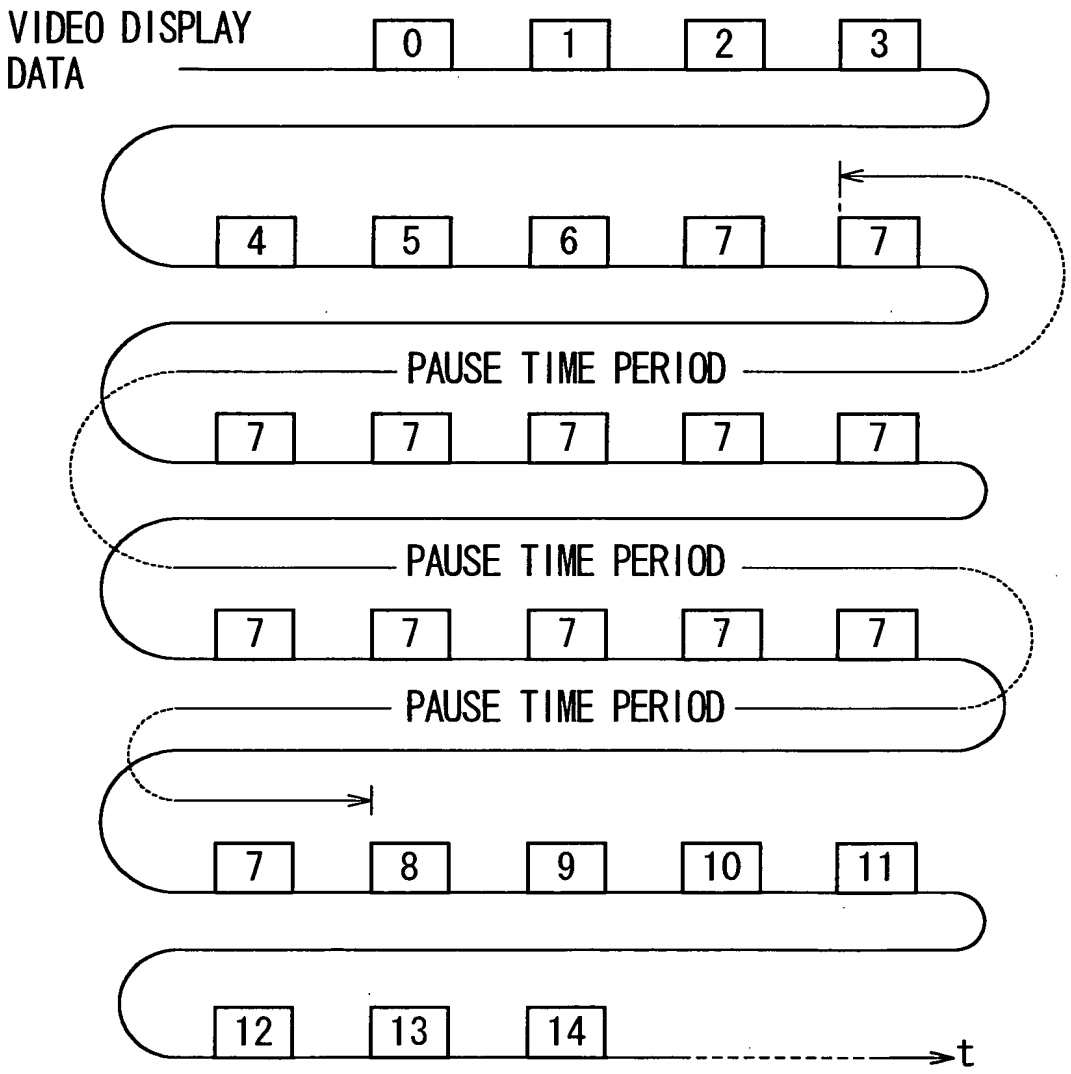

VIDEO DISPLAY DATA
0
1
2
3
4
5
6
7
7
PAUSE TIME PERIOD
7
7
7
7
7
PAUSE TIME PERIOD
7
7
7
7
7
PAUSE TIME PERIOD
7
8
9
10
11
12
13
14
t

FIG. 17

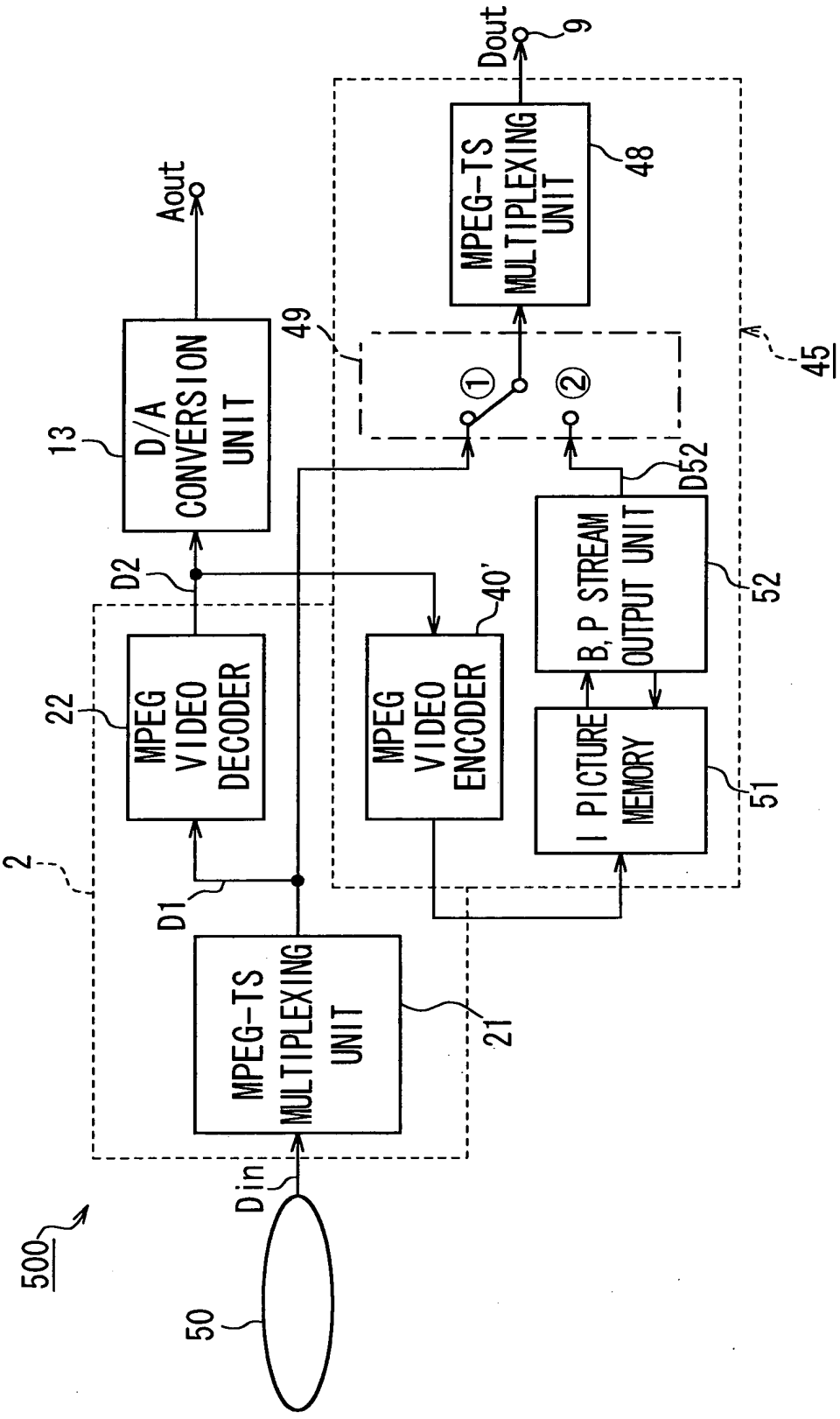
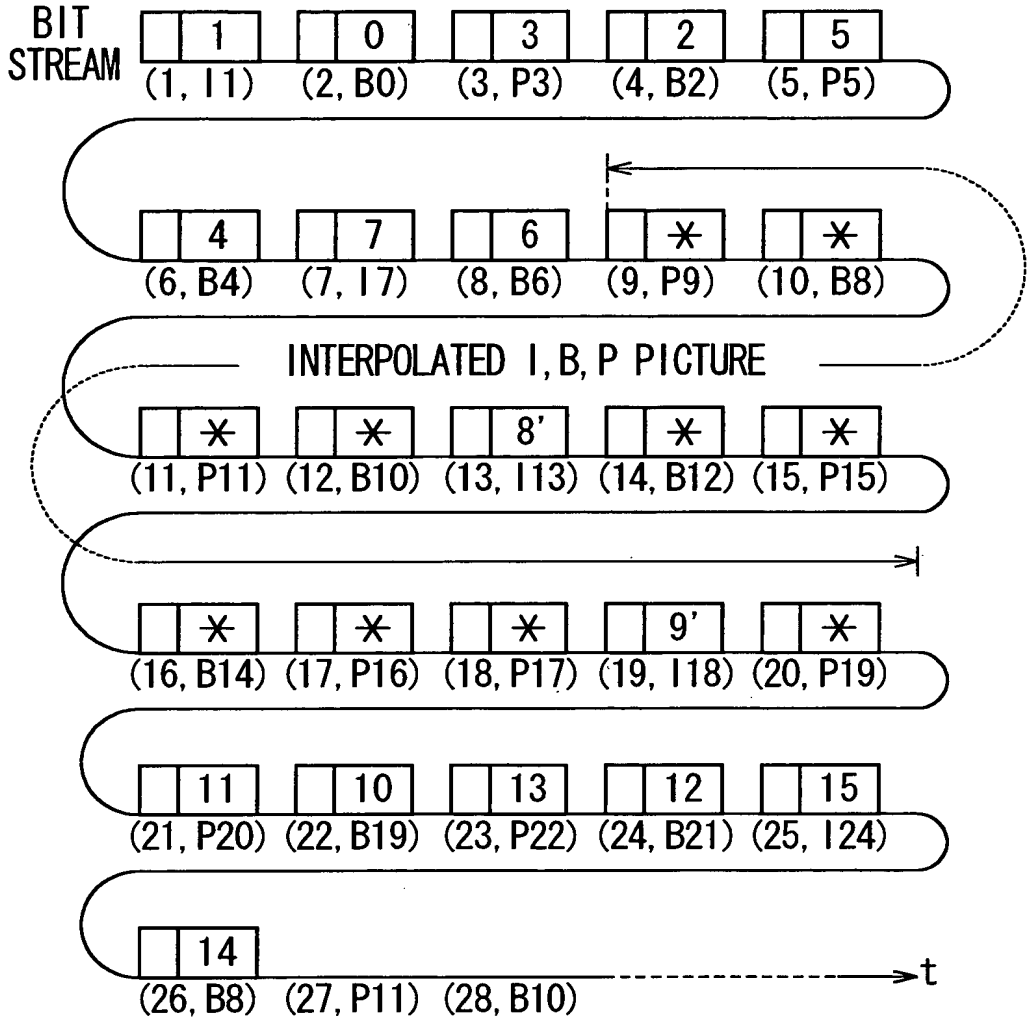

500
50
Din
2
MPEG-TS MULTIPLEXING UNIT
21
D1
MPEG VIDEO DECODER
22
D2
D/A CONVERSION UNIT
13
Aout
MPEG VIDEO ENCODER
40'
I PICTURE MEMORY
51
B, P STREAM OUTPUT UNIT
52
D52
45
49
①
②
MPEG-TS MULTIPLEXING UNIT
48
Dout
9

FIG. 18



* :BIT STREAM OF P OR B PICTURE OF DIFFERENCE "0"
8' :BIT STREAM GENERATED BY ENCODIG B PICTURE WITH I PICTURE
9' :BIT STREAM GENERATED BY ENCODIG P PICTURE WITH I PICTURE

FIG. 19

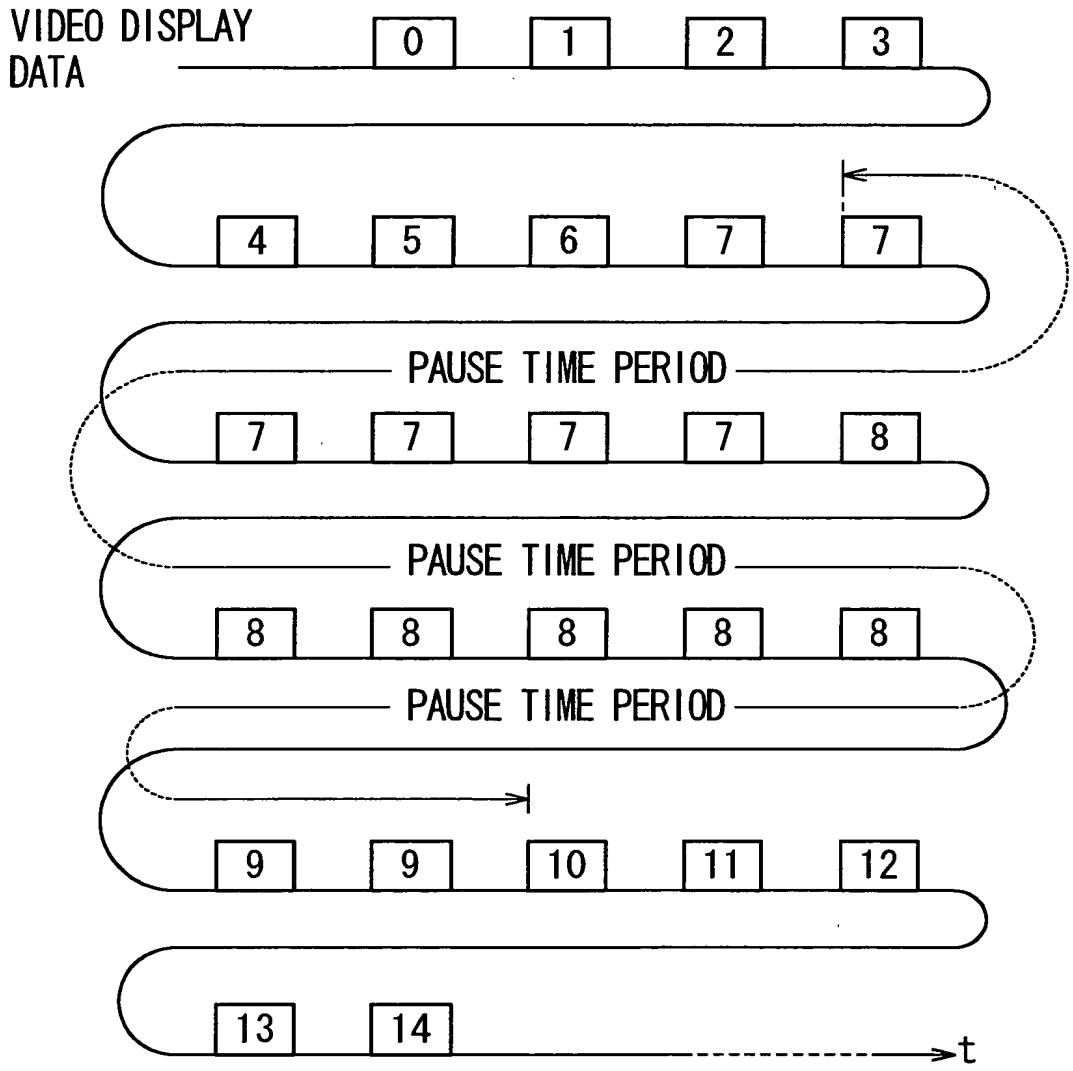

VIDEO DISPLAY DATA
0
1
2
3
4
5
6
7
7
PAUSE TIME PERIOD
7
7
7
7
8
PAUSE TIME PERIOD
8
8
8
8
8
PAUSE TIME PERIOD
9
9
10
11
12
13
14
t

FIG. 20

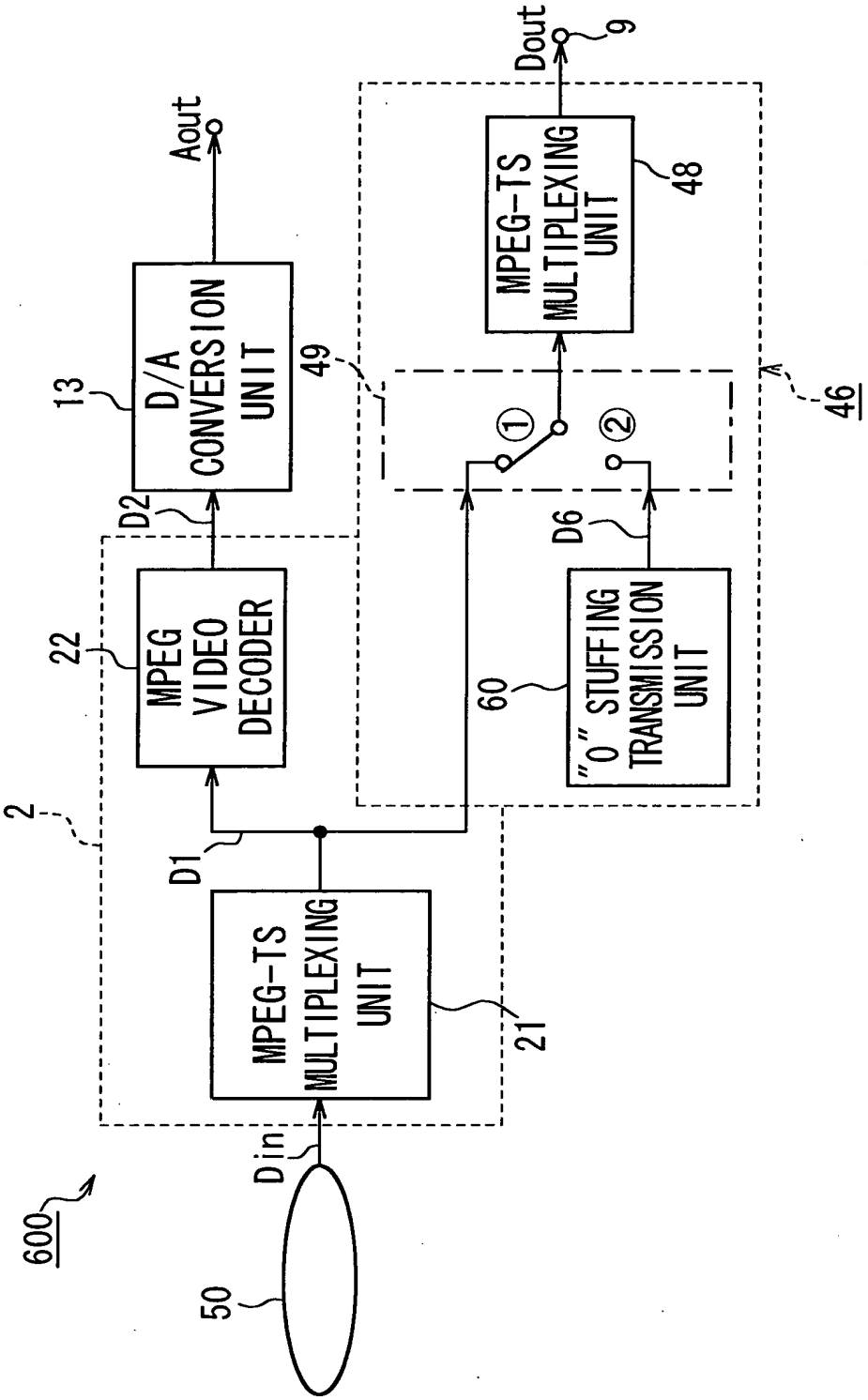

600
50
Din
MPEG-TS MULTIPLEXING UNIT
21
2
D1
MPEG VIDEO DECODER
22
D2
D/A CONVERSION UNIT
13
Aout
49
46
①
②
60
"0" STUFFING TRANSMISSION UNIT
D6
MPEG-TS MULTIPLEXING UNIT
48
Dout
9

FIG. 21

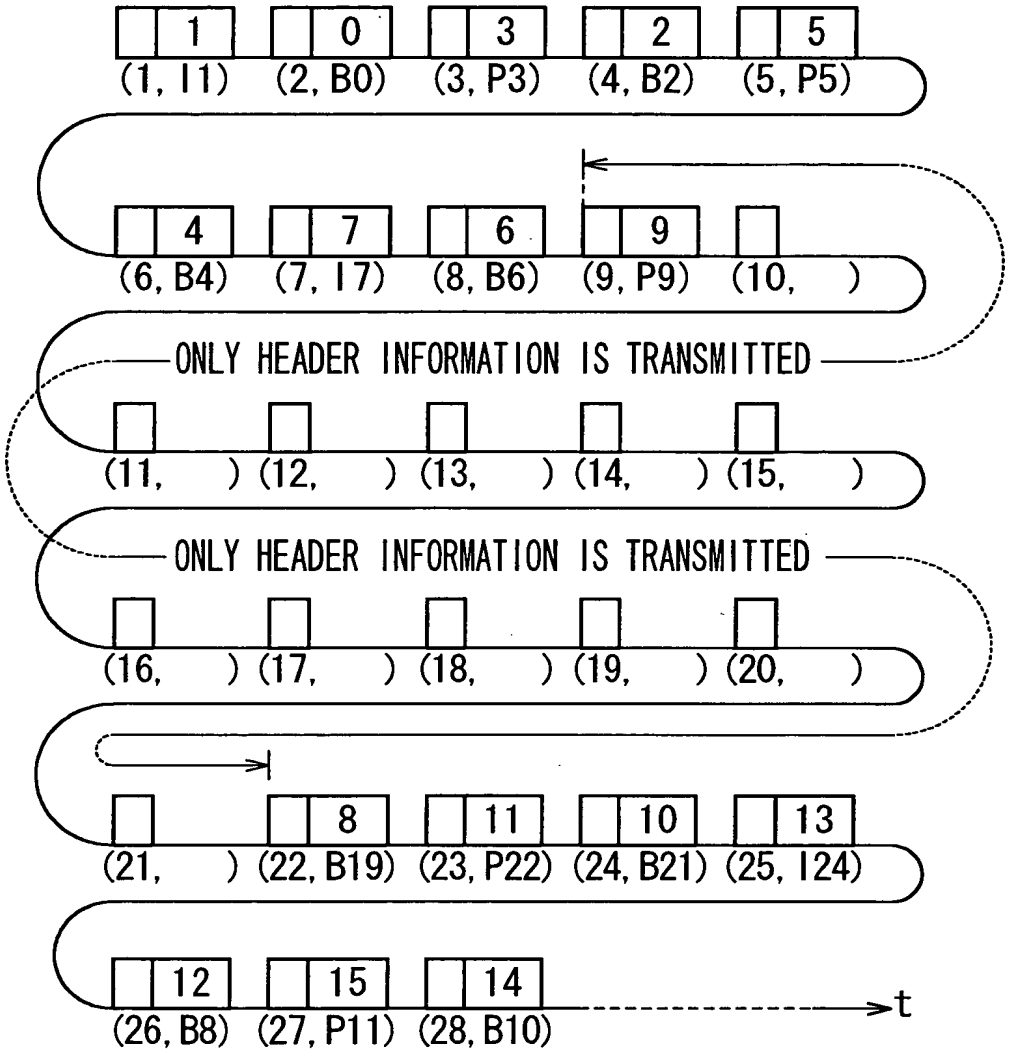

1
0
3
2
5
(1, I1)
(2, B0)
(3, P3)
(4, B2)
(5, P5)
4
7
6
9
(6, B4)
(7, I7)
(8, B6)
(9, P9)
(10,)
ONLY HEADER INFORMATION IS TRANSMITTED
(11,) (12,) (13,) (14,) (15,)
ONLY HEADER INFORMATION IS TRANSMITTED
(16,) (17,) (18,) (19,) (20,)
8
11
10
13
(21,)
(22, B19)
(23, P22)
(24, B21)
(25, I24)
12
15
14
(26, B8)
(27, P11)
(28, B10)
t

FIG. 22

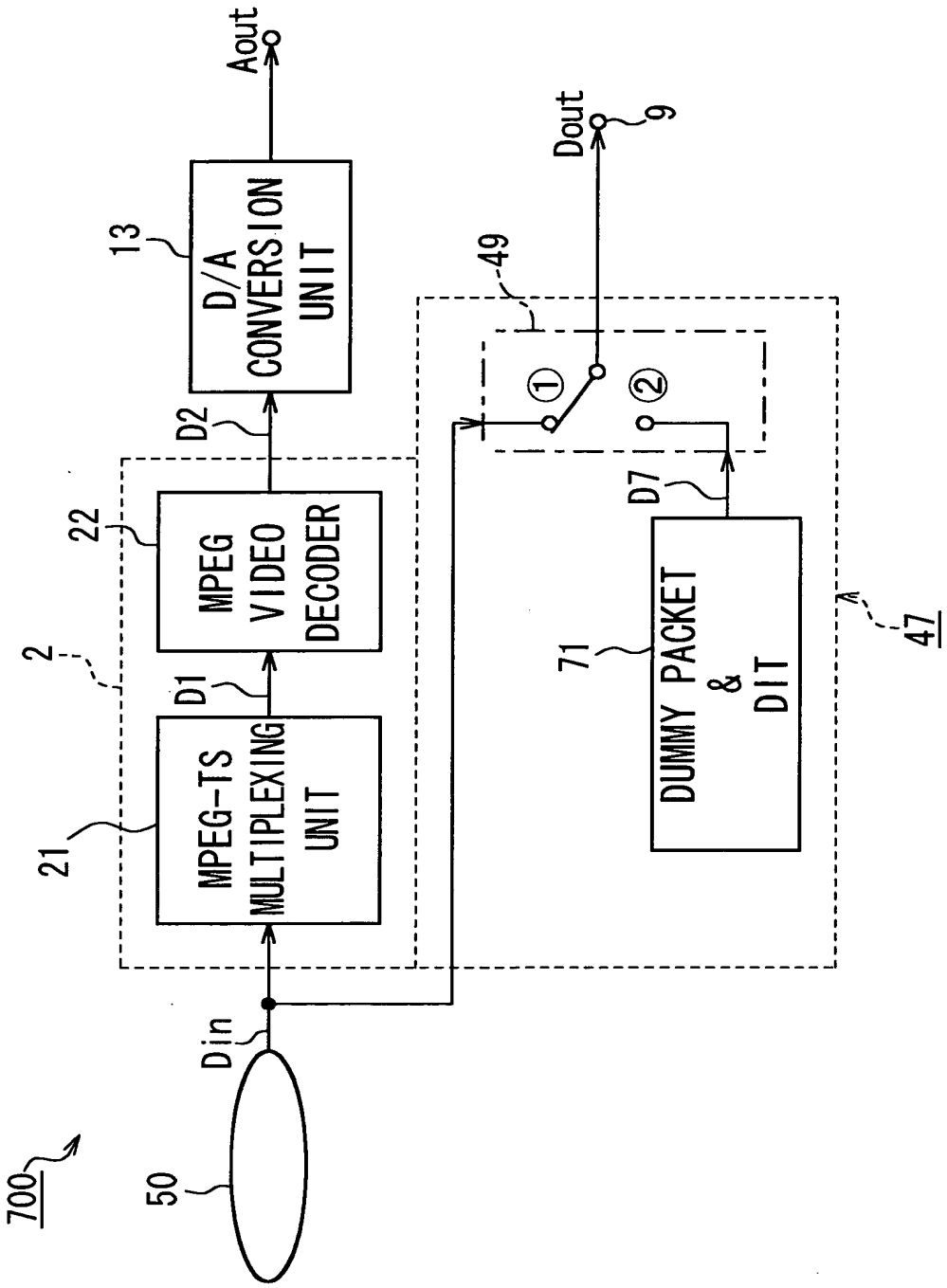
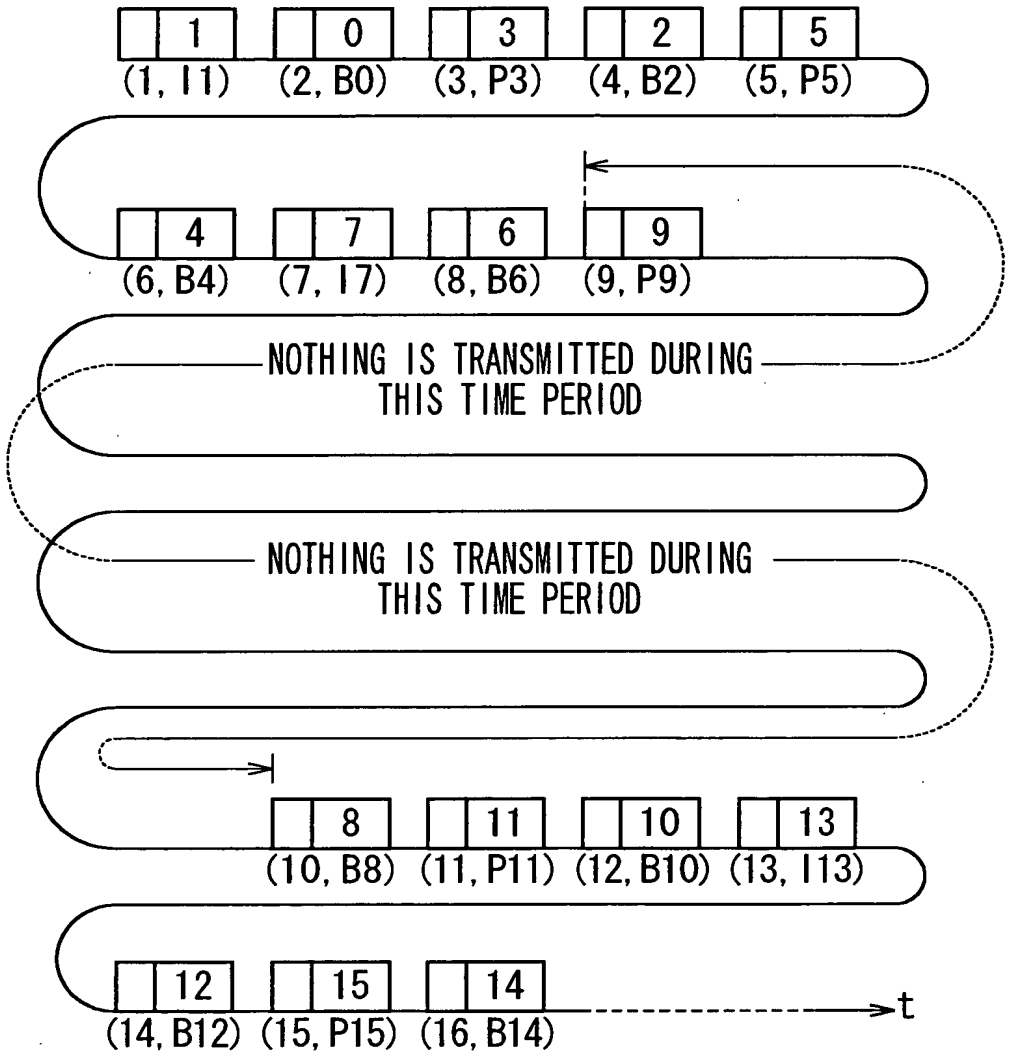

700
50
Din
21
2
MPEG-TS MULTIPLEXING UNIT
D1
22
MPEG VIDEO DECODER
D2
13
D/A CONVERSION UNIT
Aout
49
①
②
Dout
9
D7
71
DUMMY PACKET & DIT
47

FIG. 23


1
0
3
2
5
(1, I1)
(2, B0)
(3, P3)
(4, B2)
(5, P5)
4
7
6
9
(6, B4)
(7, I7)
(8, B6)
(9, P9)
NOTHING IS TRANSMITTED DURING THIS TIME PERIOD
NOTHING IS TRANSMITTED DURING THIS TIME PERIOD
8
11
10
13
(10, B8)
(11, P11)
(12, B10)
(13, I13)
12
15
14
(14, B12)
(15, P15)
(16, B14)
t